



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,583	11/20/2001	Stephen Todd	07072-146001	9738

51576 7590 12/13/2006

EMC CORPORATION
c/o DALY, CROWLEY, MOFFORD & DURKEE, LLP
354 TURNPIKE STREET
SUITE 301A
CANTON, MA 02021-2714

EXAMINER

LESNIEWSKI, VICTOR D

ART UNIT PAPER NUMBER

2152

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/989,583

Applicant(s)

TODD ET AL.

Examiner

Victor Lesniewski

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/7/2006.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. The amendment filed 9/7/2006 has been placed of record in the file.
2. Claims 1, 2, 4, 5, 7-11, 13-17, 19, and 20 have been amended.
3. Claims 18, 21, and 22 have been canceled.
4. Claims 1-17, 19, and 20 are now pending.
5. The applicant's arguments with respect to claims 1-17, 19, and 20 have been considered but are moot in view of the following new grounds of rejection.

Continued Examination Under 37 CFR 1.114

6. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous office action has been withdrawn pursuant to 37 CFR 1.114. The applicant's submission filed on 9/7/2006 has been entered.

Information Disclosure Statement

7. The IDS filed 9/7/2006 has been considered.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 2152

9. Claims 1-17, 19, and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

10. Claims 1-17, 19, and 20 recite the customer information including network addresses of the customers. Returning network addresses of the customers by the executable software module is seen as new matter that is not supported in the specification. The specification appears directed toward the use of customer account information or a customer account ID. See, for example, page 11, line 27 through page 12, line 24. However, discussion of network addresses of the customers could not be found in the specification.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1-5, 8-11, 17, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Aziz et al. (U.S. Patent Number 6,779,016), hereinafter referred to as Aziz.

Art Unit: 2152

13. Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a computer program product or a system are rejected under the same rationale applied to the described claim.

14. Aziz has disclosed:

- <Claims 1, 19, and 20>

A method of managing hardware resources, comprising: providing an executable software module configured to communicate with the hardware resources (column 4, line 54 through column 5, line 8); operating the executable software module to cause the executable software module to return information about the hardware resources (column 4, line 54 through column 5, line 8), wherein the information includes hardware configuration information associated with the hardware resources (column 13, lines 16-22) and customer information associated with customers of the hardware resources, wherein the customer information includes network addresses of the customers, allocation information indicative of allocations of the hardware resources to the customers and billable event information for use by a billing application to bill the customers and indicative of usage of the hardware resources by the customers (column 16, lines 23-46 where the system further inherently includes some type of customer identification in order to properly track customer data and must include an address of the customer in order to monitor and communicate with them); and storing the hardware configuration information and the customer information in a database (column 16, lines 1-15).

- <Claim 2>

The method of claim 1, wherein the hardware resources comprise data storage resources (column 4, lines 23-41).

- <Claim 3>

The method of claim 2, wherein the data storage resources reside in a datacenter controlled by a storage service provider (column 4, line 54 through column 5, line 8).

- <Claim 4>

The method of claim 3, further comprising presenting the hardware configuration information and the customer information to an administrator of the storage service provider (column 5, lines 3-8).

- <Claim 5>

The method of claim 4, wherein the hardware configuration information comprises data storage resource attributes (column 13, lines 16-22).

- <Claim 8>

The method of claim 4, further comprising: generating a directory of the hardware resources; and storing the directory in the database (column 10, lines 58-67).

- <Claim 9>

The method of claim 8, wherein the executable software module comprises a set of methods (column 13, lines 16-36).

- <Claim 10>

The method of claim 9, wherein the methods include a first method that, when called, causes the executable software module to identify a type of hardware resource with

Art Unit: 2152

which the executable software module is configured to communicate, and a second method that, when called, causes the software executable module to identify any hardware resources with which the executable software is configured to communicate (column 13, lines 16-36).

- <Claim 11>

The method of claim 10, wherein the methods further include a third method that, when called, causes the executable software module to poll the hardware resources identified by the executable software module to provide attribute information associated with the hardware resources (column 13, lines 16-36).

- <Claim 17>

The method of claim 5, further comprising: adding a new data storage resource to the datacenter (column 8, lines 48-65);; and placing the new data storage resource in a directory of hardware resources (column 11, lines 12-28).

Since all the limitations of the invention as set forth in claims 1-5, 8-11, 17, 19, and 20 were disclosed by Aziz, claims 1-5, 8-11, 17, 19, and 20 are rejected.

15. Claims 6, 7, and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aziz, as applied above, further in view of Nine et al. (U.S. Patent Number 6,560,611), hereinafter referred to as Nine.

16. Aziz disclosed a scalable server farm wherein a control plane operates to control the allocation and monitoring of the storage resources in the system. In an analogous art, Nine

Art Unit: 2152

disclosed a network monitoring system for monitoring all services and conditions on various networks.

17. Concerning claim 6, Aziz did not explicitly state enabling the administrator to select which data storage attributes are to be stored. However, Aziz does give an administrator control of the system via the control plane whereby the administrator can view and manipulate the data storage attributes. In this type of environment, it was well known in the art at the time of the applicant's invention that a user with administrative access may decide which attributes are to be stored and make other such administrative decisions in the operation of the system. Thus, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Aziz by adding the ability to enable the administrator to select which data storage attributes are to be stored.

18. Concerning claim 7, although Aziz did not explicitly state the use of an executable software module with Java, Nine states the use of Java in his system. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Aziz by adding the ability to utilize Java as provided by Nine. Here the combination satisfies the need for more efficient network monitoring. See Nine, column 1, lines 47-55.

19. Concerning claims 12 and 13, although Aziz did not explicitly state the use of XML to provide polling results, Nine states the use of XML in his system. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Aziz by adding the ability to utilize XML as provided by Nine. Again the combination satisfies the need for more efficient network monitoring. See Nine, column 1, lines 47-55.

Art Unit: 2152

20. Concerning claim 14, although Aziz did not explicitly state returning a list of services to the user, Nine states this feature in his system. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Aziz by adding the ability to return a list of services to the user as provided by Nine. Again the combination satisfies the need for more efficient network monitoring. See Nine, column 1, lines 47-55.

21. The above rationale also applies to those dependent claims utilizing the same combination.

22. Thereby, the combination of Aziz and Nine discloses:

- <Claim 6>

The method of claim 5, further comprising enabling the administrator to select, for a given data storage resource, which of the data storage attributes are to be stored in the database (obviousness as discussed above).

- <Claim 7>

The method of claim 1, wherein the executable software module comprises JAVA classes (Nine, column 9, lines 55-65).

- <Claim 12>

The method of claim 11, wherein results of the polling are provided in XML format (Nine, column 3, lines 37-48).

- <Claim 13>

The method of claim 11, wherein the results of the polling are provided in a format other than XML and the executable software module performing the polling converts the results of the polling to XML format (Nine, column 3, lines 37-48).

Art Unit: 2152

Furthermore, it is well known in the art to convert data into an alternate format in a network when needed.

- <Claim 14>

The method of claim 11, wherein the methods further comprise a fourth method that, when called, causes the executable software module to return a list of services and associated parameters (Nine, column 5, line 60 through column 6, line 8).

- <Claim 15>

The method of claim 14, wherein the methods further comprise a fifth method that, when called, causes the executable software module to execute a requested one of the services on a list of services (Nine, column 6, lines 9-20).

- <Claim 16>

The method of claim 15, wherein making a call to the fifth method comprises specifying values of parameters associated with the requested one of the services (Nine, column 6, lines 20-25).

Since the combination of Aziz and Nine discloses all of the above limitations, claims 6, 7, and 12-16 are rejected.

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

- Sheets et al. (U.S. Patent Number 6,816,905) disclosed a hosted service provider that allocates a plurality of individual servers to each of a plurality of customer accounts.

Art Unit: 2152

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number is 571-272-3987.

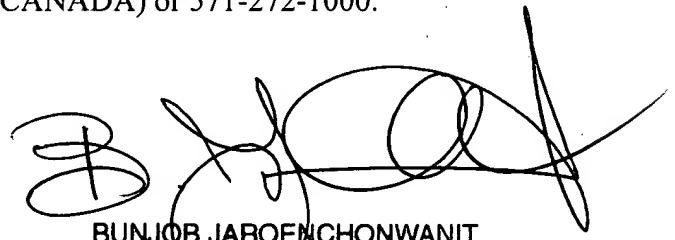
The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Victor Lesniewski
Patent Examiner
Group Art Unit 2152



BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER